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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,344

04/02/2004

Mohamad El-Batal

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7590

10/25/2006

LSI LOGIC CORPORATION

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EXAMINER

CHU, GABRIEL L

ART UNIT

PAPER NUMBER

2114

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,344

Applicant(s)

EL-BATAL, MOHAMAD

Examiner

Gabriel L. Chu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20040402</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Application does not appear to have been filed as a continuation (in part) under 35 U.S.C. 120. As such, the application is not granted the benefit of priority.
2. If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 120, a specific **reference** to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. **For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.**

If the instant application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of

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such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

3. The invention of the instant application appears to claim overlapping claimed subject matter with application 10/731191 which names as inventors both McKean and

El-Batal, whereas the invention of the instant application only names El-Batal as an inventor.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. **Claims 1-3, 6-12, 15-18 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 6-9, 11, 13-16, 18, 20, 21 of copending Application No. 10/731191 (herein 191) in view of US 5864659 (herein 659) to Kini.** An exemplary rejection is given for claim 1: An apparatus for locating a failed disk drive in a plurality of disk drives on a removable disk array module having a backplane connector (claim 1/191, "serviceable item on a subassembly", Paragraph 22 of the pre-grant publication, "The embodiment 100 may be particularly useful in a storage system that contains several replaceable disk drives that

may be mounted on a removable subassembly 102.”), comprising in combination:

a host controller disposed on said disk array module for identifying a failed disk drive and for determining the location thereof on said disk array module (1/191, “determining said status of said at least one serviceable item using a host controller in communication with said subassembly”);

a non-volatile memory device disposed on said disk array module for receiving the location of the failed disk drive from said host controller, and for recording same (1/191, “storing said status in a memory location within said subassembly”, paragraph 19, “However, the non-volatile memory 110 may contain information that is useful in the service and repair of the subassembly 102.”);

and a disk locator adapted for communicating with said non-volatile memory device, and for causing the location of the failed disk drive to be displayed (1/191, “querying said memory location within said subassembly such that said status of said at least one serviceable items is indicated”, paragraph 23, “In some cases, the identifiers 108 may be multicolored lights or LED's that indicate the status of the elements 106. For example, a green LED may indicate that the element does not require service. A red LED may indicate that service needs to be performed. A yellow LED may indicate that service may be necessary in the future or that the element is functioning in a reduced performance state. In other embodiments, a display, such as a numerical LED or LCD display, may be used to communicate status codes or other information as may be desired.”, figure 1, elements 108.).

Although 191 does not indicate that the disk locator may be “portable”, having

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such diagnostics be portable is known in the art. An example of this is shown by Kini, from line 34 of column 4, "One advantage of providing the system management capabilities on an add-in board, instead of included as part of the motherboard circuitry, is that a purchaser of a computer server need not be required to buy such capabilities unless he needs the extra reliability, accessibility, serviceability, or other monitoring capability. This permits manufacturers to keep down the cost of the servers in a very price-sensitive market." A person of ordinary skill in the art at the time of the invention would have been motivated to make a locator "portable" because, as indicated in Kini, "This permits manufacturers to keep down the cost of the servers in a very price-sensitive market."

Claims 1-18 of the instant application are anticipated by claims 1, 2, 4, 6-9, 11, 13-16, 18, 20, 21/191 in that claims 1, 2, 4, 6-9, 11, 13-16, 18, 20, 21/191 contain all of the limitations of claims 1-18 of the instant application. Claims 1-18 of the instant application therefore are not patently distinct from the earlier patent claims, and as such are unpatentable for obvious-type double patenting. (In re Goodman (CAFC) 29 USPQ2d 2010).

While limitations of the claims of 191 are broader than the claims of the instant application, the language and the disclosure of 191 indicate that the limitation of claims of the instant application are merely a subset of 191. These differences are not sufficient to render the claims patentably distinct. *Georgia-Pacific Corp. v. United States Gypsum Co.*, 195 F.3d 1322, 1325, 52 USPQ2d 1590, 1593 (Fed. Cir. 1999).

This is a provisional obviousness-type double patenting rejection. However, Examiner notes that a notice of allowance has mailed for '191.

6. **Claims 4, 5, 13, 14 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/731191 in view of US 5864659 to Kini as applied above and further in view of US 5305013 to Daniels.** In further view of the exemplary rejection to claim 1 above, and in reference to claims 4, 5, 13, 14, although 191 in view of Kini does not disclose that such LED configuration may be included in the portable disk locator, an externalized LED display that indicates disk status is known in the art. An example of this is shown by Daniels, from figure 1, element 30, line 6 of column 3, "The processor 86 receives information regarding the status of each of the disk drives 51 through 58 from the disk drive interface 82. The processor 86 writes information through a driver 88 to the LED's 41 through 48 to set the output of each of the LED's 41 through 48 depending on the status of their corresponding disk drives 51 through 58." A person of ordinary skill in the art at the time of the invention would have been motivated to externalize the LEDs from positions directly adjacent to hard drives because, from line 34 of column 3 of Daniels, "The graphical display produced by the LED's provides readily convenient information on disk drive status to an operator and obviates the necessity of reading diagnostic files, then correlating the logical volume to a physical drive and then correlating the physical disk drive to an actual location to determine which drive is of interest. The operator simply looks at the icon for an active or error indication and the indicated drive is in that same relative position in the unit."

This is a provisional obviousness-type double patenting rejection, however noted above.

Claim Objections

7. Claims 9, 18 objected to because of the following informalities:

Referring to claim 9, 18, "said at least one indicator device" is understood to refer to "at least one indicator device of said plurality of indicator devices".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claim 10-18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** Referring to claim 10, and subsequently claims 11-18, Applicant claims "a portable disk locator... with said means for identifying..." It is not clear if Applicant intends this to refer to "said means for receiving".

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-3, 6-12, 15-18 rejected under 35 U.S.C. 103(a) as being obvious over US 2005/0144508 to McKean et al. (herein 191) in view of US 5864659 to Kini.

Referring to claim 1, 10, 191 discloses an apparatus for locating a failed disk drive in a plurality of disk drives on a removable disk array module having a backplane connector (claim 1/191, "serviceable item on a subassembly", Paragraph 22 of the pre-grant publication, "The embodiment 100 may be particularly useful in a storage system that contains several replaceable disk drives that may be mounted on a removable subassembly 102."), comprising in combination:

a host controller disposed on said disk array module for identifying a failed disk drive and for determining the location thereof on said disk array module (1/191, "determining said status of said at least one serviceable item using a host controller in communication with said subassembly");

a non-volatile memory device disposed on said disk array module for receiving the location of the failed disk drive from said host controller, and for recording same (1/191, "storing said status in a memory location within said subassembly", paragraph 19, "However, the non-volatile memory 110 may contain information that is useful in the service and repair of the subassembly 102.");

and a disk locator adapted for communicating with said non-volatile memory device, and for causing the location of the failed disk drive to be displayed (1/191, "querying said memory location within said subassembly such that said status of said at least one serviceable items is indicated", paragraph 23, "In some cases, the identifiers 108 may be multicolored lights or LED's that indicate the status of the elements 106.

For example, a green LED may indicate that the element does not require service. A red LED may indicate that service needs to be performed. A yellow LED may indicate that service may be necessary in the future or that the element is functioning in a reduced performance state. In other embodiments, a display, such as a numerical LED or LCD display, may be used to communicate status codes or other information as may be desired.”, figure 1, elements 108.).

Although 191 does not indicate that the disk locator may be “portable”, having such diagnostics be portable is known in the art. An example of this is shown by Kini, from line 34 of column 4, “One advantage of providing the system management capabilities on an add-in board, instead of included as part of the motherboard circuitry, is that a purchaser of a computer server need not be required to buy such capabilities unless he needs the extra reliability, accessibility, serviceability, or other monitoring capability. This permits manufacturers to keep down the cost of the servers in a very price-sensitive market.” A person of ordinary skill in the art at the time of the invention would have been motivated to make a locator “portable” because, as indicated in Kini, “This permits manufacturers to keep down the cost of the servers in a very price-sensitive market.”

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is

thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

12. Referring to claim 2, 11, 191 in view of Kini discloses said portable disk locator comprises means for resetting said non-volatile memory device when the failed disk has been repaired or replaced (7/191, "replacing at least one of said at least one serviceable item based on said indicator; changing said status in said memory location").

13. Referring to claim 3, 12, 191 in view of Kini discloses said portable disk locator device comprises a connector adapted for mating with the backplane connector of said removable disk array module, such that said portable disk location module is placed in electrical communication with said non-volatile memory device (Kini, from line 34 of column 4, "One advantage of providing the system management capabilities on an add-in board, instead of included as part of the motherboard circuitry, is that a purchaser of a computer server need not be required to buy such capabilities unless he needs the extra reliability, accessibility, serviceability, or other monitoring capability. This permits manufacturers to keep down the cost of the servers in a very price-sensitive market.").

14. Referring to claim 6, 15, 191 in view of Kini discloses said disk array module comprises a plurality of indicator devices adapted to be activated by said portable disk locator, at least one indicator device being disposed in the vicinity of each of said disk drives (191 figure 1, elements 108.).

15. Referring to claim 7, 16, 191 in view of Kini discloses said portable disk locator device comprises a power supply for providing electrical energy thereto and to said plurality of indicator devices (Kini, figure 2, line 54 of column 4, "The backup battery 250 is coupled to each of the components on the SMA 135: the CPU 200, the interface controller 410, the RAM 212, the Flash memory 214, the interface controller 420, the LAN controller 224, and the MODEM 222. The backup battery technology is well-known. The backup battery 250 may be any one of various types, and may physically reside either on the SMA 135 itself, or may be physically detached from but electrically coupled to the SMA 135 itself In case of a power failure on the computer server 5, the backup battery 250 provides power to the SMA 135 to allow the SMA to continue to operate for a limited period of time."), a processor for reading said non-volatile memory device, such that the location of a failed disk drive is displayed by activation of said indicator device corresponding to that disk drive (1/191, "querying said memory location within said subassembly such that said status of said at least one serviceable items is indicated", paragraph 23, "In some cases, the identifiers 108 may be multicolored lights or LED's that indicate the status of the elements 106. For example, a green LED may indicate that the element does not require service. A red LED may indicate that service needs to be performed. A yellow LED may indicate that service may be necessary in

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the future or that the element is functioning in a reduced performance state. In other embodiments, a display, such as a numerical LED or LCD display, may be used to communicate status codes or other information as may be desired.”, figure 1, elements 108.).

16. Referring to claim 8, 17, 191 in view of Kini discloses said power supply comprises a battery power supply (Kini, figure 2, line 54 of column 4, “The backup battery 250 is coupled to each of the components on the SMA 135: the CPU 200, the interface controller 410, the RAM 212, the Flash memory 214, the interface controller 420, the LAN controller 224, and the MODEM 222. The backup battery technology is well-known. The backup battery 250 may be any one of various types, and may physically reside either on the SMA 135 itself, or may be physically detached from but electrically coupled to the SMA 135 itself In case of a power failure on the computer server 5, the backup battery 250 provides power to the SMA 135 to allow the SMA to continue to operate for a limited period of time.”).

17. Referring to claim 9, 18, 191 in view of Kini discloses said portable disk locator device comprises a connector adapted for mating with the backplane connector of said removable disk array module (Kini, from line 34 of column 4, “One advantage of providing the system management capabilities on an add-in board, instead of included as part of the motherboard circuitry, is that a purchaser of a computer server need not be required to buy such capabilities unless he needs the extra reliability, accessibility, serviceability, or other monitoring capability. This permits manufacturers to keep down the cost of the servers in a very price-sensitive market.”), such that at least one indicator

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device of said plurality of indicator devices disposed in the vicinity of each disk drive can receive electrical power (1/191, "querying said memory location within said subassembly such that said status of said at least one serviceable items is indicated", paragraph 23, "In some cases, the identifiers 108 may be multicolored lights or LED's that indicate the status of the elements 106. For example, a green LED may indicate that the element does not require service. A red LED may indicate that service needs to be performed. A yellow LED may indicate that service may be necessary in the future or that the element is functioning in a reduced performance state. In other embodiments, a display, such as a numerical LED or LCD display, may be used to communicate status codes or other information as may be desired.", figure 1, elements 108.).

18. Claim 4, 5, 13, 14 rejected under 35 U.S.C. 103(a) as being unpatentable over US 2005/0144508 to McKean et al. and US 5864659 to Kini as applied to claim 1 above, and further in view of US 5305013 to Daniels. Referring to claim 4, 13, 191 in view of Kini discloses said portable disk locator device comprises a power supply for providing electrical energy to the components thereof (Kini, figure 2, line 54 of column 4, "The backup battery 250 is coupled to each of the components on the SMA 135: the CPU 200, the interface controller 410, the RAM 212, the Flash memory 214, the interface controller 420, the LAN controller 224, and the MODEM 222. The backup battery technology is well-known. The backup battery 250 may be any one of various types, and may physically reside either on the SMA 135 itself, or may be physically detached from but electrically coupled to the SMA 135 itself In case of a power failure

on the computer server 5, the backup battery 250 provides power to the SMA 135 to allow the SMA to continue to operate for a limited period of time.”), a processor for reading said non-volatile memory device and communicative with indicator devices disposed in a configuration similar to that of said disk drives on said disk array module, such that the location of a failed disk drive is displayed by activation of said indicator device corresponding to that disk drive (1/191, “querying said memory location within said subassembly such that said status of said at least one serviceable items is indicated”, paragraph 23, “In some cases, the identifiers 108 may be multicolored lights or LED's that indicate the status of the elements 106. For example, a green LED may indicate that the element does not require service. A red LED may indicate that service needs to be performed. A yellow LED may indicate that service may be necessary in the future or that the element is functioning in a reduced performance state. In other embodiments, a display, such as a numerical LED or LCD display, may be used to communicate status codes or other information as may be desired.”, figure 1, elements 108.).

Although 191 in view of Kini does not disclose that such LED configuration may be included in the portable disk locator, an externalized LED display that indicates disk status is known in the art. An example of this is shown by Daniels, from figure 1, element 30, line 6 of column 3, “The processor 86 receives information regarding the status of each of the disk drives 51 through 58 from the disk drive interface 82. The processor 86 writes information through a driver 88 to the LED's 41 through 48 to set the output of each of the LED's 41 through 48 depending on the status of their

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corresponding disk drives 51 through 58." A person of ordinary skill in the art at the time of the invention would have been motivated to externalize the LEDs from positions directly adjacent to hard drives because, from line 34 of column 3 of Daniels, "The graphical display produced by the LED's provides readily convenient information on disk drive status to an operator and obviates the necessity of reading diagnostic files, then correlating the logical volume to a physical drive and then correlating the physical disk drive to an actual location to determine which drive is of interest. The operator simply looks at the icon for an active or error indication and the indicated drive is in that same relative position in the unit."

19. Referring to claim 5, 14, 191 in view of Kini and Daniels discloses said power supply comprises a battery power supply (Kini, figure 2, line 54 of column 4, "The backup battery 250 is coupled to each of the components on the SMA 135: the CPU 200, the interface controller 410, the RAM 212, the Flash memory 214, the interface controller 420, the LAN controller 224, and the MODEM 222. The backup battery technology is well-known. The backup battery 250 may be any one of various types, and may physically reside either on the SMA 135 itself, or may be physically detached from but electrically coupled to the SMA 135 itself In case of a power failure on the computer server 5, the backup battery 250 provides power to the SMA 135 to allow the SMA to continue to operate for a limited period of time.").

Conclusion

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20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See notice of references cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (571) 272-3656. The examiner can normally be reached on weekdays between 8:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gabriel L. Chu
Examiner
Art Unit 2114

gc